Commissioning Learning Resources: A Platform for Community Driven Curriculum

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Abstract

The reliance on prescribed or national curriculum in schools is causing an ever enlarging gap between the knowledge and skills the schools are developing on one hand, and the students' interests and career opportunities on the other. Building on previous work on using the notion of commissioning for location based services and video bootlegging, we propose using the concept of commissioning (as used in Digital Civics research) in the context of education. The commissioning platform is built around developing learning resources with the aim of making it possible to both commission community relevant projects to schools, and for schools to commission the community to help in different learning projects/activities. The aim is to develop a platform that can help build a community driven curriculum that is more relevant to students' future opportunities, more engaging and motivating for students, and one that helps strengthen the partnership between schools and their communities. In this paper, we introduce the general concept of using commissioning in education along with some possible usage scenarios.

Introduction

We are living in an era characterized by rapid advancements in technology which is affecting every aspect of our professional and daily lives, accompanied by a constantly changing and highly competitive job market. Consequently, the strict reliance on a prescribed or national curriculum in schools is causing an ever enlarging gap between the knowledge and skills students are developing and those needed by the job market. Ito et al. [3] used the phrase "Broken Pathways From Education to Opportunity" to highlight this gap and its negative consequences. This gap between opportunities and students' own interests on one side and curriculum on the other is directly or indirectly leading to many students of all abilities being disengaged, academically, cognitively or behaviourally. The repercussions being worst for disadvantaged students who are often marginalised and excluded from educational opportunities.

On the other hand, when it comes to goods and digital services that are integrated in our daily lives, there is a growing trend towards ensuring the relevance of such goods and services to their users by encouraging inclusivity early on in their design and development [14, 2]. In other words, the current trend in this case is towards narrowing the gap between those benefiting from such goods and services and those developing them. Open Source software

communities and Crowdfunding platforms are good examples of current approaches for wide-reaching engagement and inclusion of community members in technology development. Citizen Science platforms (e.g. [5]) is another approach that is gaining popularity to engage communities in the scientific research process at its different stages.

Our goal is to build upon these ideas to develop a learning resources commissioning platform that can help bridge the gap between schools and the outside world (Figure 1). This can help build partnerships between schools and community individuals or organizations (such as businesses, public service sector, universities, and voluntary organizations). The platform makes it possible for both those outside the schools to commission community relevant projects to schools, and for students to commission the community to help with different learning activities (such as data collection and talking to experts). It also makes it possible for businesses to commission content creators to create courses or learning materials relevant to those businesses, thus expanding students' employability opportunities.
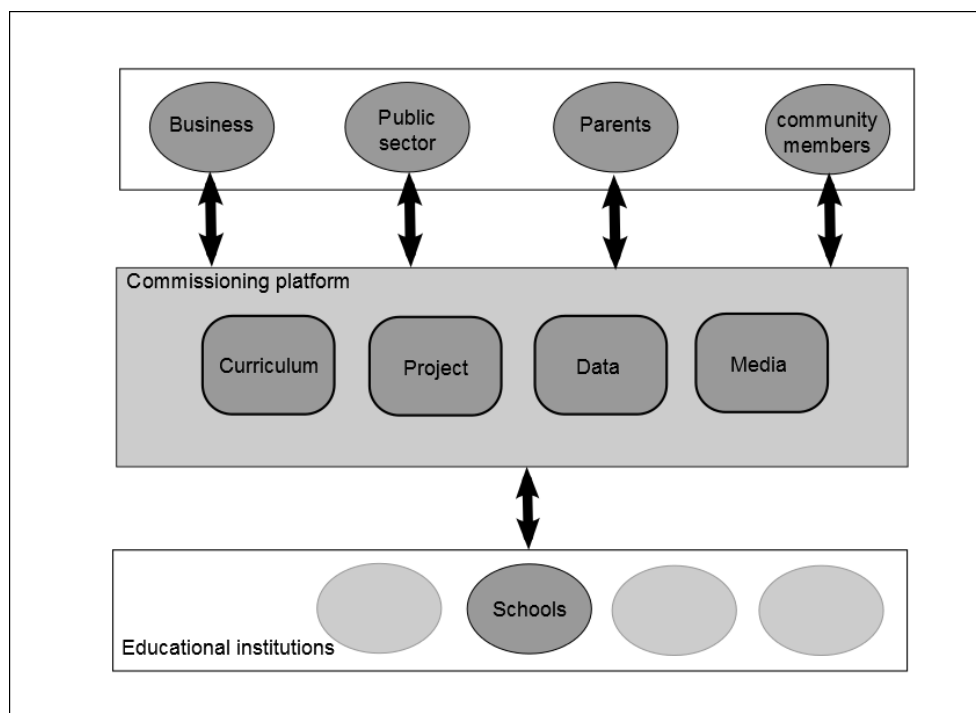

Figure 1: A commissioning platform to bridge the gap between schools and their communities around learning resources

In this short paper, we introduce our view on using the concept of commissioning (a specific view on commissioning as applied in our research in Digital Civics) in education. We outline some possible usage scenarios on how commissioning can help address the challenges of linking schools to community as well as developing community/job market relevant curriculum.

Commissioning learning resources: a developing concept

A commissioning platform (in the context of learning) is a system that has the following main features:

- Allows anyone (students or teachers, other individuals, organizations, etc.) who has identified a need for a project, a learning resource or data collection, for example, to express their need and start a campaign to promote their idea and gather support for it.

The campaign can be promoted through the platform and other communication channels such as social networks.

- Upon gathering enough endorsements to validate wider need for the proposed idea, the system moves the process to a design phase. At this phase, supporters can actively contribute to defining a number of attributes related to the proposed idea (these differ based on the type of the proposal: a project, a learning resource, or data collection).
- Based on the contributions, the system allows the preparation of one or more deliverables and presents them as outcomes of the commissioning process.
- Supports the promotion of any produced deliverables/products to a wider audience.
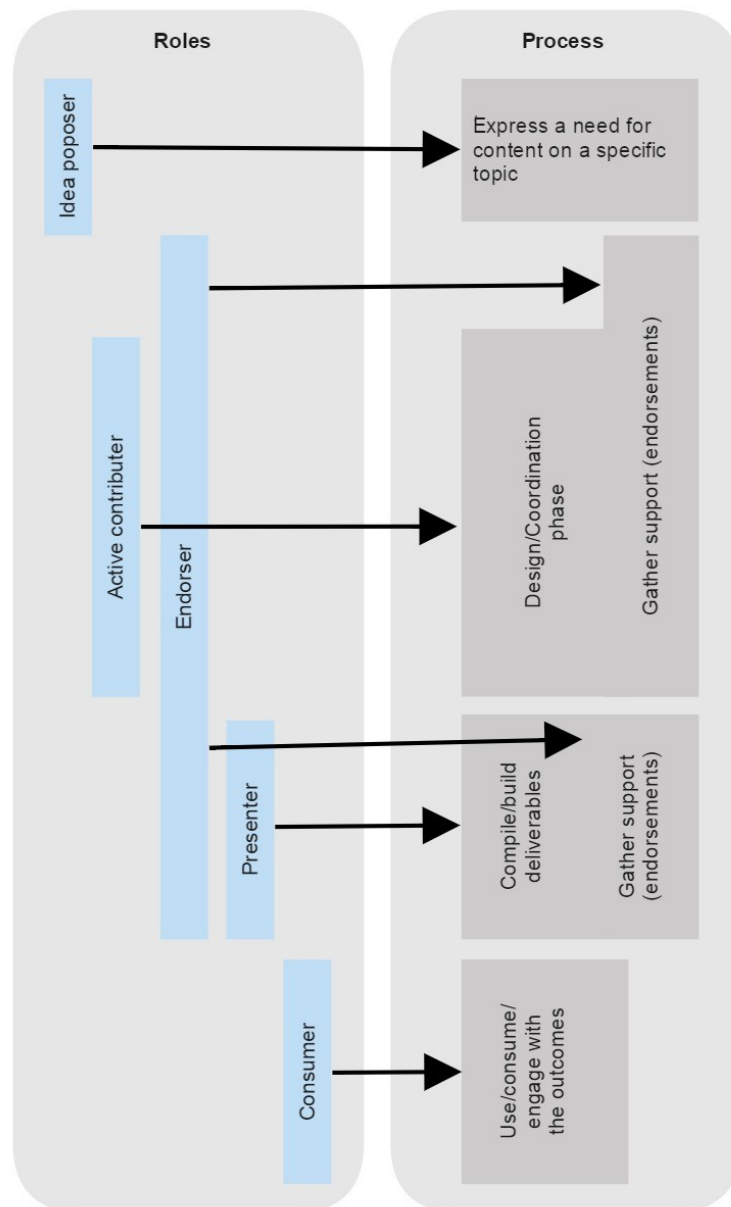

Figure 2: A general commissioning process

A general process for commissioning content is depicted in Figure 2, while a short example scenario is presented in Figure 3. The platform thus addresses the challenge of allowing a reciprocal relationship to develop between the school and other organizations and individuals. Moreover, it supports coordinating the process of co-designing the curriculum (one that is

based on projects and enquiry), collecting the necessary data and media, and disseminating the outcome of such co-operation to a wider community in more creative ways and through multiple channels.

A village shop owner wants to increase awareness about the benefits of shopping from the local village shops versus larger city supermarkets. The owner proposes the idea on the platform with the aim of commissioning students of the village school to lead an awareness campaign on the benefits of encouraging local village shops. The idea gains support from other shop owners, some parents, as well as the local school geography teacher who was made aware of the project. The project moves to the design phase where the shop owners with the help of the teacher shape this idea as a project based learning activity with clear learning goals. They agree on some key points to address, a time scale, and possible outcomes (such as flyers and an awareness video). This ends up being a well-defined project based learning activity that ticks a number of learning objectives around Economy, Society, Environment, Effects, and Change; one that other teachers can use for their local areas as well.

During carrying out the project, the students then decide to start another commissioning activity where they commission their local community (individuals and the shop owners themselves) to provide some short, mobile-based, video captures in addition to some data that they can use to produce their flyers and awareness video.

Figure 3: An example of reciprocal commissioning scenario.

Allowing early engagement of different stakeholders in a project's design and development process also ensures the strongly needed support of a number of early adopters who are normally key to the success of any new project.

A commissioning platform designed with the aim of engaging schools and their larger communities around curriculum, projects, data and media can play a significant role in addressing the challenge of the growing gap between curriculum and post-school opportunities. Moreover, it has the potential to increase students' engagement and motivation due to the real-life relevance of the learning activities. The reciprocal relationship made possible by the platform allows both schools (teachers and/or students) and the community to commission each other for

- Projects: For example, businesses propose and co-design enquiry-based projects for students with schools.

- Data collection: Examples include

    o Businesses commission students to collect data (e.g. information about certain species in their natural habitat)

    o Students commission other members of the community or students from other schools to collect data for them as part of their projects (e.g., students in Italy commissioning students in the UK to collect data about bird migration in the North East region of England, or students commission the parents and local community to collect data for them).

- Video footage: For example, students working on a project about how their local area changed in the past 50 year. In this case, the students can design the required shoots (including themes, locations and interviews), and commission other members of their local community to be crew members helping with the collection of the required video footage.

- Producing media: For example, students through the media production part of the platform collaborate with a local video or audio broadcasting channel to co-produce and share the outcome of a project with the local community (or wider audience).

- Curricula and learning plans: For example, students undertaking a project in collaboration with educators and local industry design a list of topics to be explored with corresponding learning outcomes, for future classes and students in other schools.

As illustrated in these different examples, the aim of the platform goes beyond simple data/media commissioning to getting the schools and their communities involved in the co-design of the enquiry based projects in the first place, and also in the production and sharing (or broadcasting) of the outcomes of such projects in more creative ways than written reports or presentations. There is a real prospect that such work will result in greatly enhanced social and network capital for school students and far greater engagement in education and their communities. When students work on projects or learning resources originally commissioned by businesses, they will acquire work-relevant knowledge and skills that can effectively contribute to expanding their career opportunities.

Related commissioning based work

Many of these underlying concepts have been implemented and used in contexts other than education such as location-based services and event bootlegging.

FeedFinder (https:// feed-finder.co.uk) is a location-based review app for breastfeeding mothers [1]. It has been developed as a response to the more common model of broadcasting public health information to people rather than getting them engaged as active participants in improving public health. In FeedFinder, citizens are treated as experts that help create and maintain trusted information services around issues that matters to them and share this information with others.

App Movement (https://app-movement.com/) goes a step further and gives citizens control over which services get commissioned in the first place [2]. It allows individuals to propose their own location-based service which can be anything they are interested in such as places to fly a drone, bird watching spots, child friendly streets, etc. The first step is to propose the idea, then after gaining enough number of supporters, the app moves to a design phase where the supporters customize the brand, look and feel and the rating criteria. Once the design phase is complete, an app gets automatically generated and uploaded onto the app stores. With a number of supporters already being engaged in the design process, once the app is live, it will immediately have a number of enthusiastic community members who populate the app with initial data and help grow the community further.

Bootlegger (https://bootlegger.tv) was originally developed as part of a project exploring the democratization of music production [6]. However, it was then realized that this concept has

much wider potential in education, community engagement, and citizen science. It allows any individual to act as a director, producer, and/or crew member. The system helps coordinating camera operators, suggesting shots and collecting video captures. It can be the perfect platform to commission the community (including students) to either simply collect video footage (for an event, phenomena, distant locations, etc.), or be engaged in editing the useful shoots into a video. It is easy to imagine how this can be used by students to commission members of the community to collect media footage about animals in their natural habitat for a science project for example.

Conclusions

Building on the success of previous work that utilized the notions of commissioning such as AppMovement and Bootlegger, we aim to extend the scope to include commissioning in education. The goal is to provide a platform that helps build a community driven curriculum that has the potential to expand students' career opportunities and increase their motivation and engagement. We are still at the design stage of the platform and in the process of building better understanding of the requirements of the community and the challenges facing the implementation and adoption of such a platform.

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